

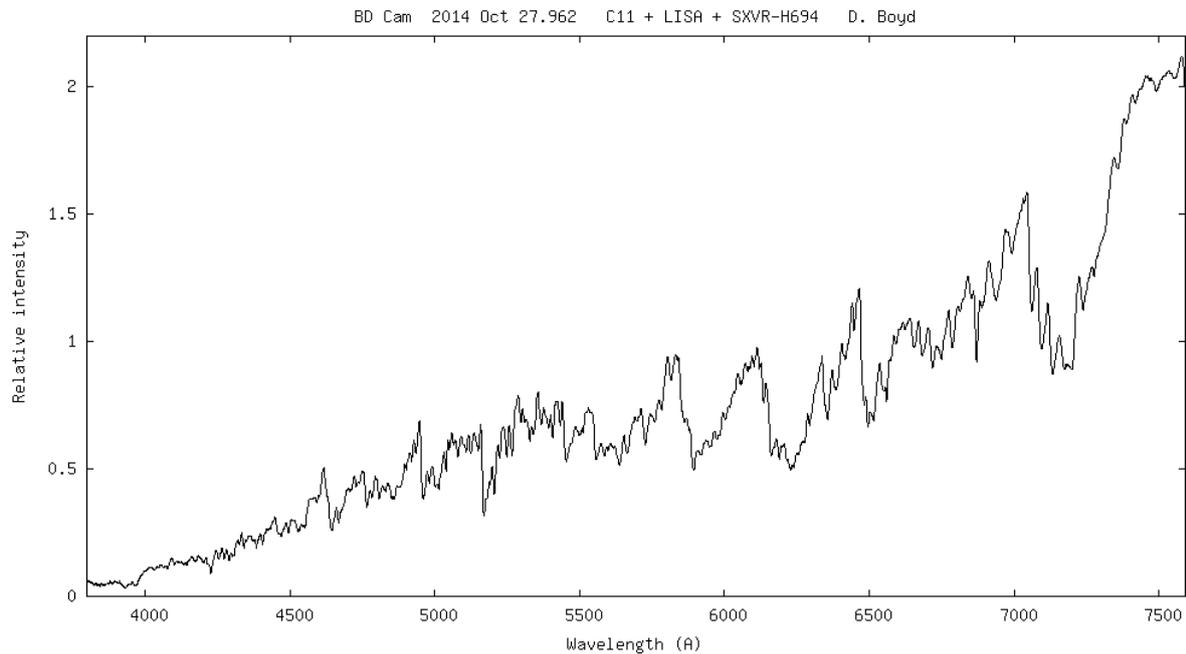
Spectra of Symbiotic Stars

David Boyd

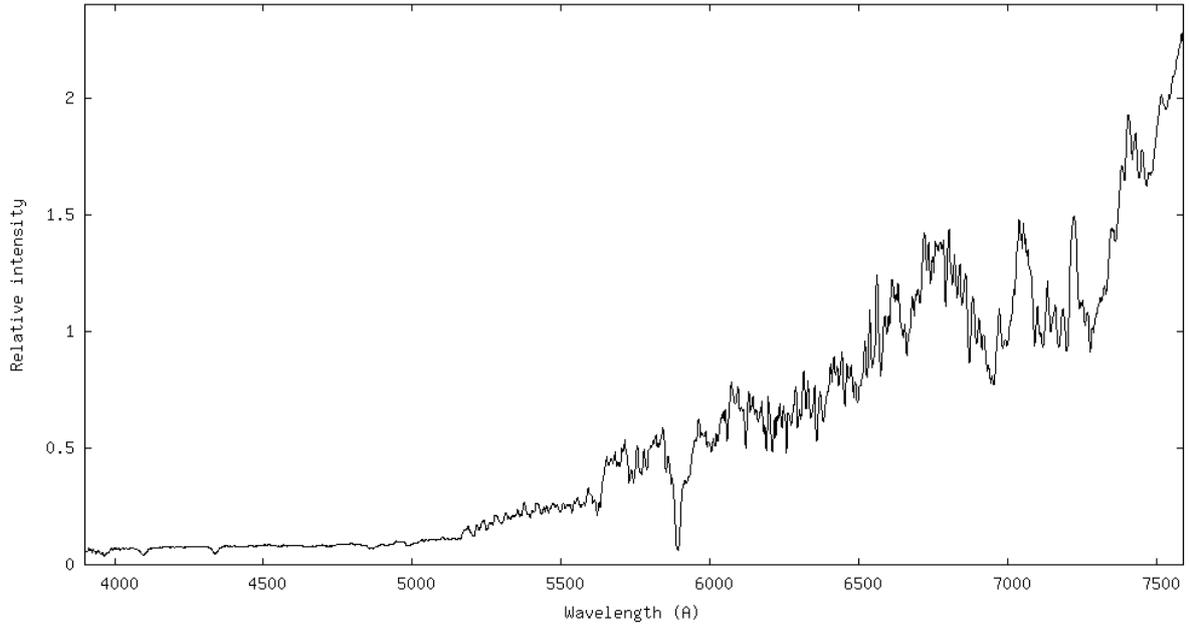
Here are spectra of five symbiotic stars taken during the past 3 months. Symbiotic stars are binary systems usually consisting of a cool red giant star, which may pulsate, and a white dwarf with an accretion disc. As a class they are referred to as Z And stars although in practice this is a very diverse group with a wide range of spectral types. The red giant may emit a wind and the accretion process may cause flickering, so these stars often have complex light curves and spectra which vary in time. Some spectra have strong hydrogen emission lines from the white dwarf accretion process.

The V magnitudes and spectral types listed in Simbad (<http://simbad.u-strasbg.fr/simbad/>) for these five stars are shown below.

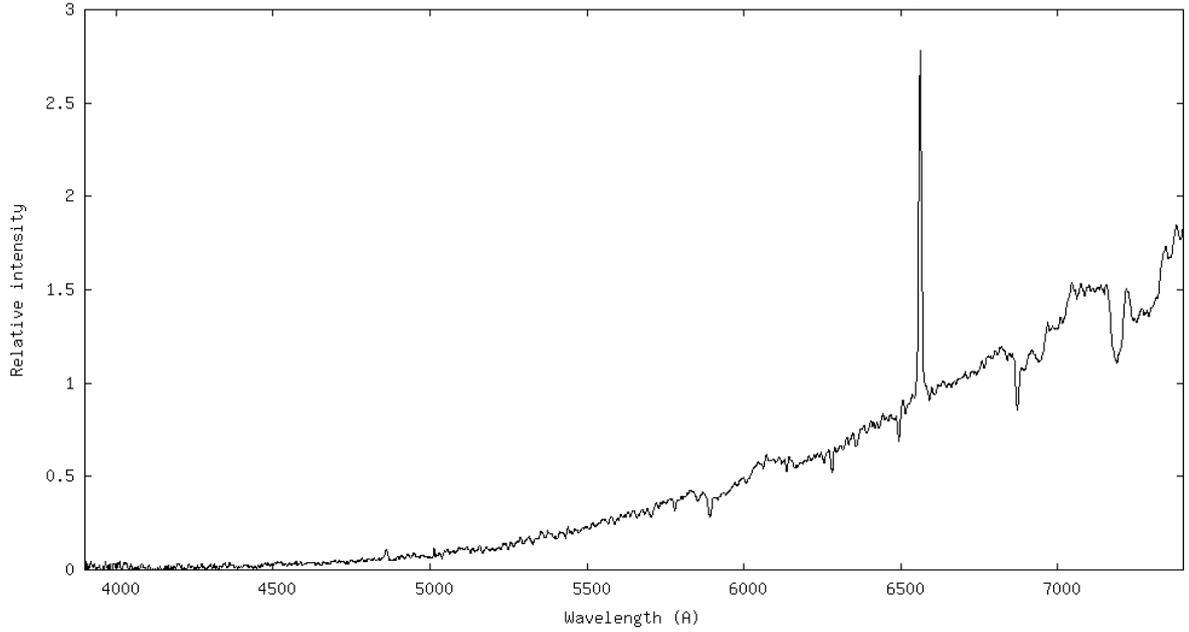
Star	V magnitude	Spectral type
BD Cam	5.1	S3.5/2 B
UV Aur	10.4	C8,1Je + B9V
V627 Cas	10.6	M2eII-III C
EG And	7.2	M2III:e C
AX Per	9.4	M3IIIep + A0 C

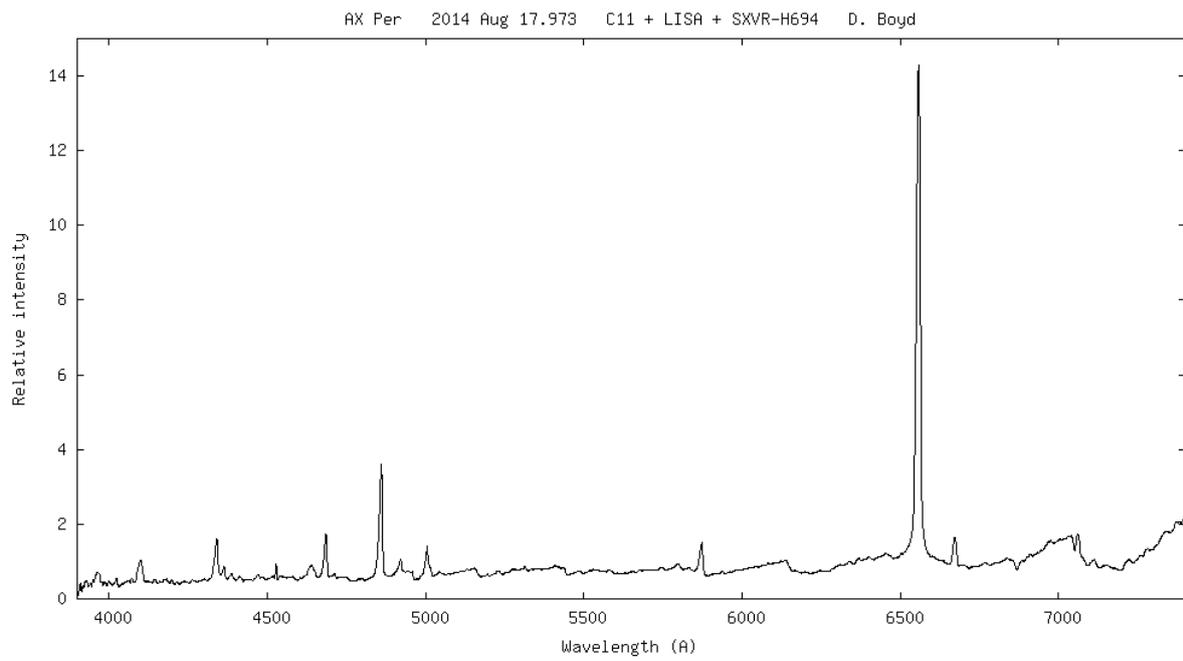
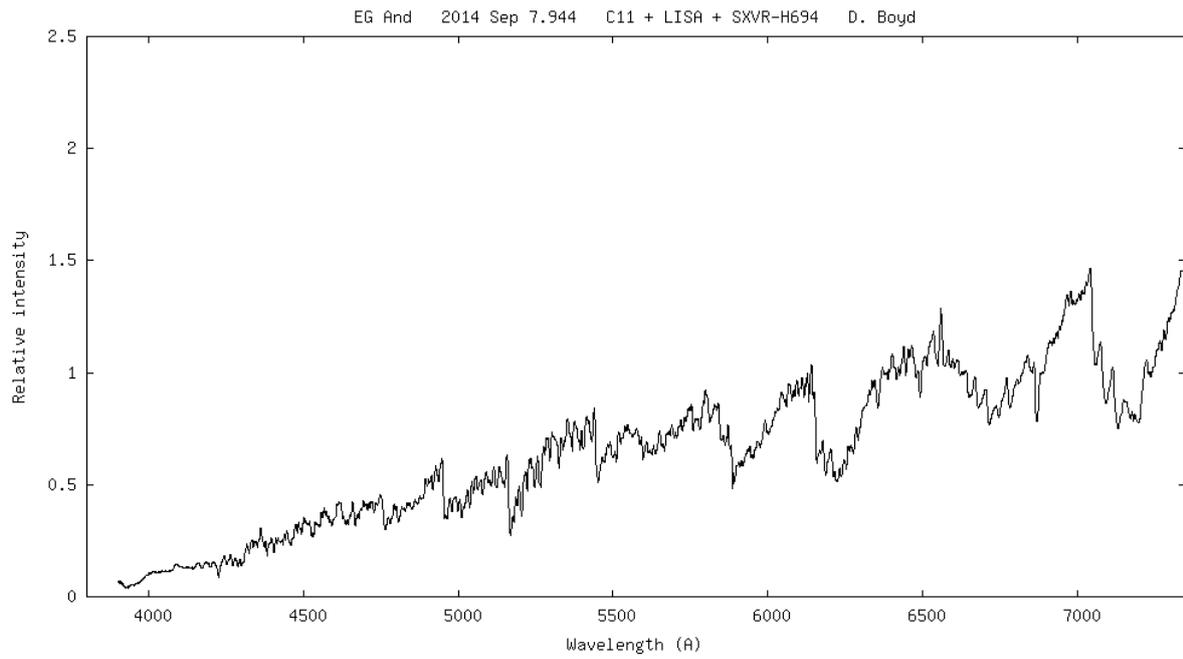


UV Aur 2014 Oct 27.983 C11 + LISA + SXVR-H694 D. Boyd



V627 Cas 2014 Sep 29.937 C11 + LISA + SXVR-H694 D. Boyd





Published in BAA VSS Circular No 162, December 2014.